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OFFICE OF INSPECTOR GENERAL

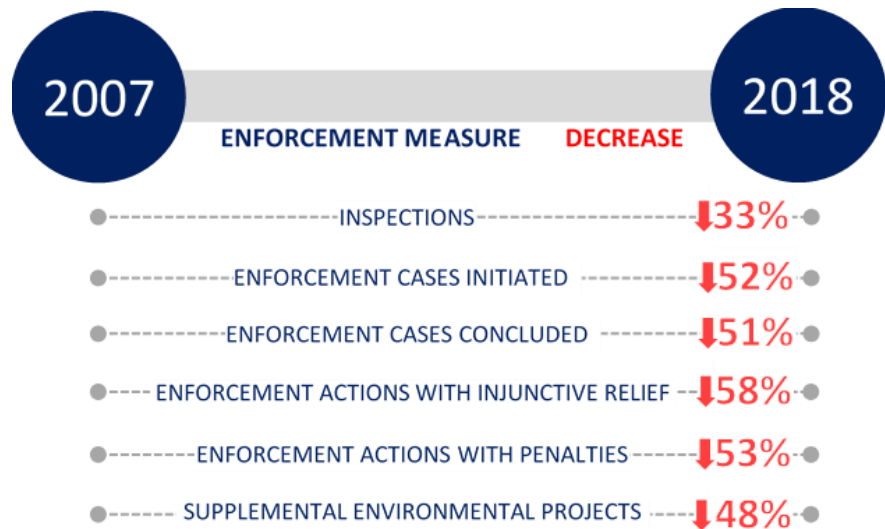


Compliance with the law

EPA's Compliance Monitoring Activities, Enforcement Actions, and Enforcement Results Generally Declined from Fiscal Years 2006 Through 2018

Report No. 20-P-0131

March 31, 2020



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Types of Enforcement Results

| | |
|------------------------------------|--|
| Environmental Benefits | Environmental and health improvements, such as reductions in pollution or waste treatment, achieved because the regulated entity—such as a pesticide manufacturer or oil refinery—returned to compliance. |
| Injunctive Relief | Action that the EPA orders a regulated entity to take to return to and maintain compliance with environmental laws. |
| Penalties | Financial fines a regulated entity pays to the U.S. Treasury in connection with the entity's noncompliance of environmental laws. |
| Supplemental Environmental Project | An additional environmental improvement project that a regulated entity agrees to complete as part of an enforcement action. For example, the regulated entity may agree to provide programs to communities impacted by the noncompliance. |

Abbreviations

| | |
|-----|--------------------------------------|
| EPA | U.S. Environmental Protection Agency |
| FY | Fiscal Year |
| OIG | Office of Inspector General |
| SEP | Supplemental Environmental Project |
| USD | U.S. Dollars |

Cover Image: The EPA's enforcement measures decreased when comparing FYs 2007 and 2018. (OIG graphic)

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At a Glance

Why We Did This Project

The Office of Inspector General conducted this audit of the U.S. Environmental Protection Agency to identify the trends in EPA-led enforcement actions and results from fiscal years 2006 through 2018. We also sought to determine the key factors explaining those trends. This report focuses on national trends. A forthcoming report will discuss regional and statute-specific trends and key factors.

The EPA's Office of Enforcement and Compliance Assurance works to ensure that environmental statutes are fairly and effectively enforced at approximately 40 million regulated federal and private entities. The EPA reports the following measures to the public each year:

- Compliance monitoring activities, such as inspections.
- Enforcement actions, such as case initiations and conclusions.
- Enforcement results, such as penalties; corrective actions, called *injunctive relief*; supplemental environmental projects; and environmental benefits.

This report addresses the following:

- *Compliance with the law.*

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[List of OIG reports.](#)

EPA's Compliance Monitoring Activities, Enforcement Actions, and Enforcement Results Generally Declined from Fiscal Years 2006 Through 2018

What We Found

The EPA's annual level of compliance monitoring activities, enforcement actions, and enforcement results generally declined throughout the scope of our audit:

- The number of *inspections* that the EPA conducted decreased by 33 percent when comparing FYs 2007 and 2018.
- The numbers of enforcement actions *initiated* and *concluded* by the EPA decreased by 52 and 51 percent, respectively, when comparing FYs 2007 and 2018.
- The EPA concluded 58 percent fewer enforcement actions with *injunctive relief* in FY 2018 than in FY 2007. Over those 12 years, the EPA estimated the lowest value of injunctive relief in FY 2018 (\$3.9 billion) and estimated the highest injunctive relief value in FY 2011 (\$21 billion).
- The EPA concluded 53 percent fewer enforcement actions with *penalties* in FY 2018 than in FY 2007. Over those 12 years, the EPA assessed the lowest penalty total in FY 2018 (\$69 million) and assessed the highest penalty total in FY 2016 (\$6.1 billion).
- The total number of *supplemental environmental projects* decreased by 48 percent. FY 2017 had the lowest total estimated value of supplemental environmental projects (\$18 million), whereas FY 2009 had the highest (\$53 million).
- The value of *environmental benefit* commitments to reduce, treat, or eliminate pollutants varied from FYs 2012 through 2018 but decreased by 64 percent when comparing FYs 2012 and 2018. The number of commitments also decreased by 31 percent when comparing FYs 2012 and 2018.

Additionally, both funding for the EPA's enforcement program and the number of enforcement staff decreased by 18 percent and 21 percent, respectively, when comparing FYs 2006 and 2018.

While we were conducting this audit, the EPA released its FY 2019 annual enforcement measures. Compared to FY 2018, four of the 15 enforcement measures increased, while 11 continued to decrease. The EPA's enforcement funding and staff also continued to decrease in FY 2019.

We make no recommendations in this report. The assistant administrator for Enforcement and Compliance Assurance provided a response to our draft report on March 30, 2020. We modified the report based on the Agency's response and technical comments, as appropriate.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

THE INSPECTOR GENERAL

March 31, 2020

MEMORANDUM

SUBJECT: EPA's Compliance Monitoring Activities, Enforcement Actions, and Enforcement Results Generally Declined from Fiscal Years 2006 Through 2018
Report No. 20-P-0131

FROM: Sean W. O'Donnell

A handwritten signature in blue ink that reads "Sean W O'Donnell".

TO: Susan Parker Bodine, Assistant Administrator
Office of Enforcement and Compliance Assurance

This is our report on the subject audit conducted by the Office of Inspector General of the U.S. Environmental Protection Agency. The project number for this audit was OA&E-FY19-0030. This report contains findings that describe the trends in national enforcement for fiscal years 2006 through 2018. This report represents the opinion of the OIG and does not necessarily represent the final EPA position. Final determinations on matters in this report will be made by EPA managers in accordance with established audit resolution procedures.

The Office of Enforcement and Compliance Assurance is responsible for the topic discussed in this report.

You are not required to respond to this report because this report contains no recommendations. However, if you submit a response, it will be posted on the OIG's website, along with our memorandum commenting on your response. Your response should be provided as an Adobe PDF file that complies with the accessibility requirements of Section 508 of the Rehabilitation Act of 1973, as amended. The final response should not contain data that you do not want to be released to the public; if your response contains such data, you should identify the data for redaction or removal along with corresponding justification.

We will post this report to our website at www.epa.gov/oig.

Table of Contents

| | |
|--|----|
| Purpose | 1 |
| Background | 1 |
| EPA Conducts Compliance Monitoring Activities, Initiates Enforcement Actions, and Tracks Enforcement Results..... | 2 |
| EPA Publicly Reports Annual Enforcement Measures | 3 |
| Responsible Office | 4 |
| Scope and Methodology | 4 |
| FY 2006 Enforcement Measures | 4 |
| FY 2019 Enforcement Measures | 5 |
| Prior Reports | 5 |
| EPA Inspections and Enforcement Actions Declined | 6 |
| EPA Conducted Fewer Inspections | 7 |
| EPA Initiated Fewer Enforcement Cases | 7 |
| EPA Concluded Fewer Enforcement Cases | 9 |
| Enforcement Results with Recorded Monetary Value Declined | 10 |
| Number of Concluded Enforcement Actions with Injunctive Relief Declined | 11 |
| Number of Concluded Enforcement Actions with Penalties Declined..... | 13 |
| Number of SEPs Decreased..... | 15 |
| Estimated Environmental Benefits Associated with Concluded Enforcement Actions Varied or Declined | 16 |
| Commitments to Reduce, Treat, or Eliminate Pollution as a Result of Concluded Enforcement Actions Decreased | 17 |
| Commitments to Properly Treat, Minimize, or Dispose of Waste as a Result of Concluded Enforcement Actions Remained Steady | 19 |
| Commitments to Clean Up Contaminated Soil or Water as a Result of Concluded Enforcement Actions Decreased | 21 |
| EPA's Enforcement Resources Declined | 22 |
| Eleven of 15 Enforcement Measures Continued to Decrease in FY 2019 | 23 |
| Summary | 25 |
| Agency Response and OIG Assessment | 25 |

Appendices

| | | |
|----------|--|-----------|
| A | EPA's Annual Enforcement Measures by Year | 26 |
| B | Agency Response to Draft Report..... | 30 |
| C | Distribution | 32 |

Purpose

The Office of Inspector General conducted this audit of the U.S. Environmental Protection Agency to identify the trends in EPA-led enforcement activities, actions, and results from fiscal years 2006 through 2018. We also sought to determine the key factors explaining those trends and the differences in enforcement results among regions and environmental statutes.

This report is the first of two that will address these objectives. This report focuses on the first objective and identifies national trends in EPA-led enforcement activities, actions, and results. A second report will address our regional and statute-specific findings, as well answer our second objective to determine key factors that explain the national, regional, and statute-specific trends.

Background

The EPA's mission is to protect human health and the environment, ensuring that all Americans are protected from significant risks where they live, learn, and work. As part of this mission, the EPA enforces environmental statutes and regulations at approximately 40 million regulated federal and private entities, such as pesticide manufacturers or oil refineries. According to the *FY 2018–2020 U.S. EPA Strategic Plan*:

A robust enforcement program is critically important for addressing violations and promoting deterrence, and supports the Agency's mission of protecting human health and the environment. Ensuring compliance with the law also ensures consistency and certainty for the regulated community so it has a complete understanding of the impact of proposed actions on human health, the environment, and the economy, and a clear path and timeline to achieve that compliance.¹

The EPA's Office of Enforcement and Compliance Assurance works with the EPA's ten regional offices, state and tribal governments, and other federal agencies

The EPA remains responsible and accountable to the President, the Congress and the public for upholding the rule of law, promoting progress toward meeting national environmental goals and ensuring that federal statutes are consistently implemented and enforced.

—EPA Administrator Andrew Wheeler,
October 30, 2018

to ensure that federal environmental laws and regulations are enforced fairly and effectively. The EPA has authorized most states and some tribes to directly enforce environmental laws, while the EPA retains oversight responsibilities. If a state or a tribe lacks enforcement authority, the EPA directly implements the enforcement program for that state or tribe.

¹ EPA, *FY 2018–2022 U.S. EPA Strategic Plan*, [EPA-190-R-18-003](#), February 2018 (updated September 2019).

EPA Conducts Compliance Monitoring Activities, Initiates Enforcement Actions, and Tracks Enforcement Results

When the EPA or an authorized enforcement authority identifies a violation of environmental laws or regulations during an inspection or other compliance monitoring activity, the EPA may initiate an enforcement action. These enforcement actions produce enforcement results that can be tracked in terms of both monetary values and projected environmental benefits. The enforcement activities, actions, and results discussed in this report are described below:

- **Inspections** and other **compliance monitoring activities** assess a regulated entity's compliance with environmental regulations and laws. The EPA conducts inspections to examine compliance either with a single statute, such as the Clean Water Act, or with multiple statutes to address broader environmental compliance. Inspections are the dominant, but not the only, type of monitoring activity the EPA conducts to assess compliance. For simplicity, we generally refer to all compliance monitoring activities as inspections in this report.
- **Enforcement actions** are initiated by the EPA to address instances of noncompliance, which are typically identified through inspection findings, tips, or self-reported violations. In this report, we discuss two types of enforcement action measures—numbers of case initiations and case conclusions. Concluded cases may result in injunctive relief; penalties; supplemental environmental projects, referred to as SEPs; and environmental benefits, as described below.
- **Injunctive relief** refers to actions a regulated entity must perform, or refrain from performing, as a result of the conclusion of an enforcement action. Injunctive relief generally aims to bring the regulated entity into compliance with applicable environmental laws and regulations. The EPA measures the value of injunctive relief in terms of the estimated cost to the regulated entity performing the corrective action. For example, in a 2018 [settlement](#), MarkWest Energy Partners agreed to invest an estimated \$2.6 million to install and operate technologies to reduce its emissions of regulated pollutants at its facilities in two states. Regulated entities often implement injunctive relief as investments made over several years or decades, although the EPA measures the result in the year the settlement was concluded.
- **Penalties** are monetary assessments a violator pays to the U.S. Treasury in connection with the violator's noncompliance with regulatory or statutory requirements. Environmental laws, regulations, and EPA policies establish the criteria for penalty amounts. For example, in the 2018 MarkWest [settlement](#), the company was required to pay a civil penalty of \$610,000 in addition to implementing the injunctive relief discussed above. Criteria

affecting penalty amounts may include, among others, the severity and duration of the noncompliance, the size of the regulated entity, the entity's history of violations, the entity's level of culpability, and the degree to which the entity derived an economic benefit from noncompliance.

- **SEPs** are additional environmental improvement projects that a regulated entity voluntarily agrees to perform as part of a settlement.² SEPs are expected to produce environmental and public health benefits beyond those required by law and regulation. For example, in the 2018 MarkWest [settlement](#), the company agreed to complete SEPs valued at \$2.4 million. These projects, which supplement the injunctive relief and the civil penalty for this settlement discussed above, include running a community project for emissions monitoring.
- **Environmental benefits** are the estimated environmental improvements to be achieved if all terms of the concluded enforcement action are met. The EPA tracks and reports three types of environmental benefits:
 - Reduction, treatment, or elimination of pollution.
 - Cleanup of contaminated soil and water.
 - Treatment, minimization, or proper disposal of hazardous and nonhazardous waste.

EPA Publicly Reports Annual Enforcement Measures

Each fiscal year, the EPA publishes its annual enforcement measures on its [website](#). Prior to posting this information, the Office of Enforcement and Compliance Assurance collects and validates data from the ten EPA regions about their enforcement activities, actions, and results. The website details the enforcement program overall, annual monetary and environmental results, and year-to-year enforcement trends for ten years. The website also highlights specific accomplishments, such as cases that resulted in large monetary enforcement results or significant environmental results. For example, the EPA highlighted a landmark Clean Air Act [settlement](#) with Volkswagen in the Agency's FY 2016 annual enforcement measures; the settlement resulted in approximately \$17.8 billion in penalties and injunctive relief.

Appendix A summarizes the EPA's annual enforcement results for FYs 2006 through 2018. Tables in Appendix A are referenced throughout the report with the "A-" prefix.

² On March 12, 2020, the U.S. Department of Justice directed its attorneys to no longer include SEPs in EPA judicial settlements. See Department of Justice, [Memorandum](#) to Environment and Natural Resources Division Deputy Assistant Attorney Generals and Section Chiefs, from Assistant Attorney General Jeffrey Bossert Clark, Subject: *Supplemental Environmental Projects ("SEPs") in Civil Settlements with Private Defendants*, dated March 12, 2020. As of March 30, 2020, the EPA has not issued a public position on this memorandum.

Responsible Office

The EPA's Office of Enforcement and Compliance Assurance is responsible for setting the Agency's enforcement priorities, tracking enforcement measures, and reporting enforcement measures to the public.

Scope and Methodology

We conducted our work from November 2018 to March 2020. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

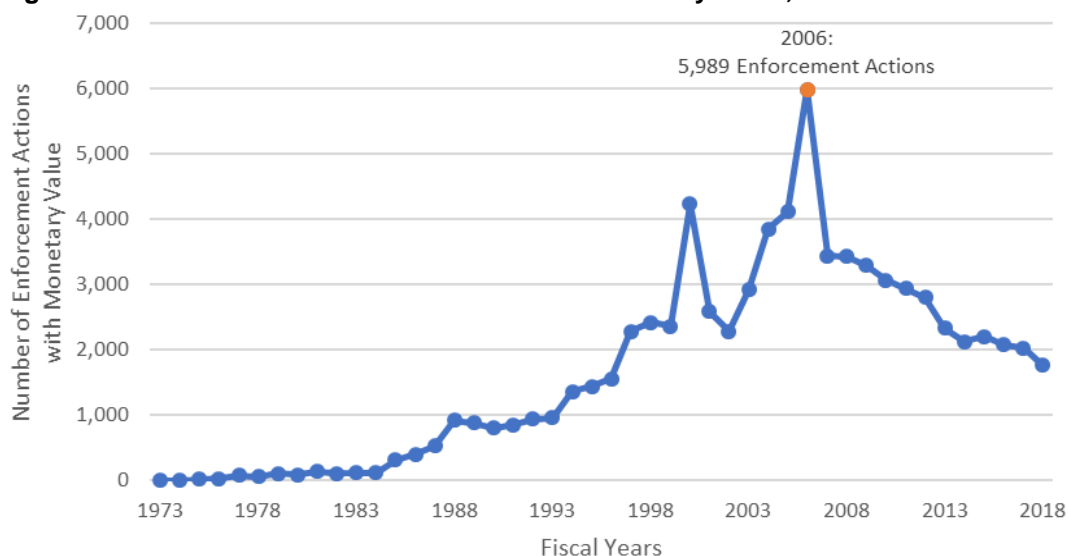
This report includes only the information collected to describe the national enforcement trends. It does not include findings or conclusions from our ongoing work; a second report will provide information related to the key factors contributing to these trends and the effect of these trends. The second report will also provide details about regional and statutory enforcement measures.

To identify trends in federal enforcement measures, we analyzed EPA annual enforcement data from FYs 2006 through 2018 from the Office of Enforcement and Compliance Assurance's internal Federal Enforcement and Compliance Dashboard. Because the data in the Dashboard are updated daily, analyses of data pulled on one date may differ slightly from data pulled on a later date and yield slightly different analytic results. However, we determined that these minimal differences do not impact the overall results of our trend analyses. We obtained data related to FYs 2006 through 2018 from December 20, 2018, through April 4, 2019. We did not examine informal, criminal, or state enforcement actions.

FY 2006 Enforcement Measures

In our initial analysis, we determined that FY 2006 was a unique year because the EPA concluded a historic number of enforcement actions, as shown in Figure 1. These primarily resulted from a national initiative to focus enforcement efforts on air emissions from concentrated animal feeding operations. These cases represented 42 percent of the total number of cases that the EPA concluded in FY 2006, whereas these types of cases represented less than 1 percent of the total number of concluded cases in the 12 other years included in our period of analysis. We determined that including FY 2006 in our trend analyses exaggerated the overall decline in enforcement activities and results. As a result, while we include FY 2006 in most figures and tables, we generally exclude that year's enforcement activities and results from our trend analyses.

Figure 1: Number of enforcement actions with monetary value, FYs 1973–2018



Source: OIG analysis of the EPA's annual enforcement data.

FY 2019 Enforcement Measures

To further our understanding of national trends, we expanded our analyses to include FY 2019 after the Office of Enforcement and Compliance Assurance released its annual enforcement measures on February 13, 2020. We pulled the data related to FY 2019 from the EPA's Dashboard from February 24, 2020, through March 10, 2020. While we considered these data and provide a summary of how they fit into overall trends, we did not include them in our tables and figures for this report.

Prior Reports

In 2013, we reported on the EPA's enforcement trends for a six-year period from FYs 2006 through 2011.³ We found that while the number of concluded enforcement actions for FYs 2006 through 2011 remained relatively constant overall, the monetary results that EPA regions achieved from enforcement actions varied. The variations were explained by the timing and locations of a few large concluded cases. In any given year, the conclusion of one or a few large cases can result in unusually large monetary results. National Enforcement Initiatives set by the Office of Enforcement and Compliance Assurance drove most of these large cases. This report made no recommendations to the EPA.

In 2020, the U.S. Government Accountability Office reported that the EPA collects a range of information about compliance and enforcement efforts.⁴ The

³ EPA OIG, *Response to Congressional Request on EPA Enforcement*, Report No. [13-P-0168](#), February 28, 2013.




⁴ Government Accountability Office, *Environmental Protection: Additional Action Needed to Improve EPA Data on Informal Enforcement and Compliance Assistance Activities*, Report No. [GAO-20-95](#), January 31, 2020 (released March 2, 2020).

Government Accountability Office found that while the EPA collected data on formal enforcement activities, it did not consistently collect data about compliance assistance and informal enforcement activities for its national databases. Additionally, the Government Accountability Office found that several of the EPA’s FY 2018 enforcement-related reports did not disclose known limitations about the Agency’s enforcement data. Without this information, readers of the EPA’s annual reports risked drawing inaccurate conclusions or information from the data. The Government Accountability Office did not assess the reliability of the data but rather critiqued the Agency’s inconsistency in stating the known limitations of the data in some FY 2018 enforcement-related reports. The Government Accountability Office made three recommendations to the assistant administrator for Enforcement and Compliance Assurance, including that the EPA share the known limitations of data in its annual reports and provide information on the intended use of the EPA’s data. The EPA agreed with all recommendations. As of March 15, 2020, these recommendations were considered open.

EPA Inspections and Enforcement Actions Declined

The number of EPA-led inspections, case initiations, and case conclusions generally declined from FYs 2007 through 2018 (Table 1). These compliance monitoring activities and enforcement actions form the foundation of the EPA’s enforcement program. The *FY 2018–2022 U.S. EPA Strategic Plan* states that after the EPA identifies a violation of regulation or law through an inspection, tip, or self-report, the Agency “will enforce the rule of law in a timely manner and take action against those that violate environmental laws to the detriment of human health or the environment.”

Table 1: Summary of trends in the number of EPA’s annual inspections, case initiations, and case conclusions, FYs 2007–2018

| | Visual depiction of trend | Range | Median / Average |
|-------------------------|---|------------------|------------------|
| Inspections |  | 10,687 to 21,269 | 17,181 / 16,949 |
| Case initiations |  | 1,829 to 3,784 | 2,656 / 2,815 |
| Case conclusions |  | 1,819 to 3,724 | 2,715 / 2,815 |

Source: OIG analysis of the EPA’s annual enforcement data.

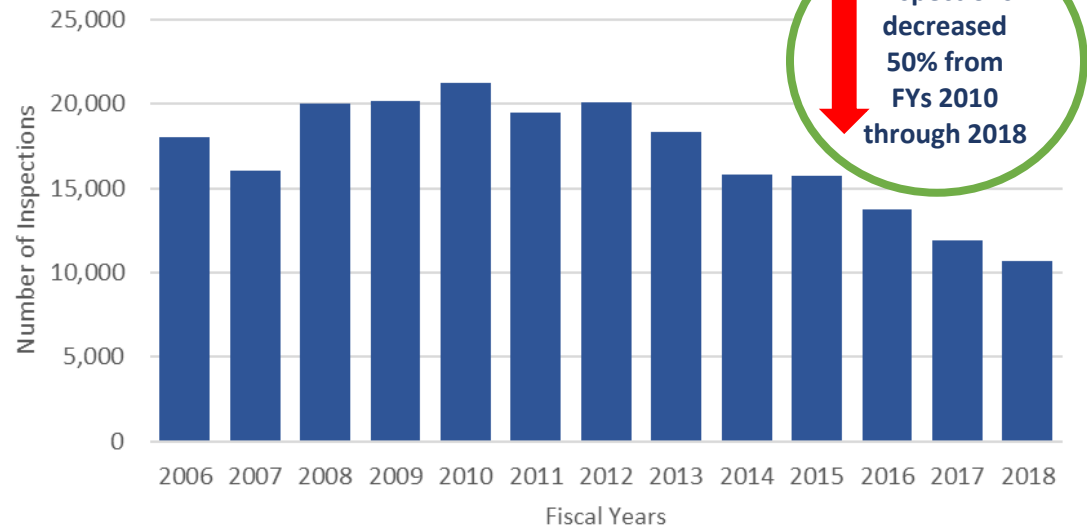
Why do we refer to median values?

We use **median** when discussing the EPA’s enforcement results because of the effect large-value settlements have on the average. In the summary tables, we also report the average so the reader can see how the medians and averages diverge. The median is the value that separates the higher half of the data from the lower half of the data. It is the middle value. The median is not affected by a small number of very large or very small values, like an average may be. It provides a better idea of the “typical” value in the data set.

EPA Conducted Fewer Inspections

The total number of annual inspections decreased by 33 percent when comparing FYs 2007 and 2018 (Figure 2; Table A-1). The number of inspections *increased* from FYs 2007 through 2010 and then *decreased* from FYs 2010 to 2018 by 50 percent. In the time period we examined, the EPA conducted the fewest inspections in FY 2018.

Figure 2: Total EPA inspections, FYs 2006–2018



Source: OIG analysis of the EPA's annual enforcement data.

EPA Initiated Fewer Enforcement Cases

The annual number of EPA case initiations generally declined from FYs 2007 through 2018 (Figure 3; Table A-1). After case initiations remained steady in FYs 2007, 2008, and 2009, they began to trend downward in FY 2010. While the downward trend was relatively consistent, FYs 2013 and 2017 had disproportionate drops in case initiations. Overall, case initiations decreased 52 percent from 3,784 in FY 2007 to 1,829 in FY 2018. In the time period we examined, the EPA initiated the fewest cases in FY 2018.

Figure 3: Total EPA enforcement case initiations, FYs 2006–2018



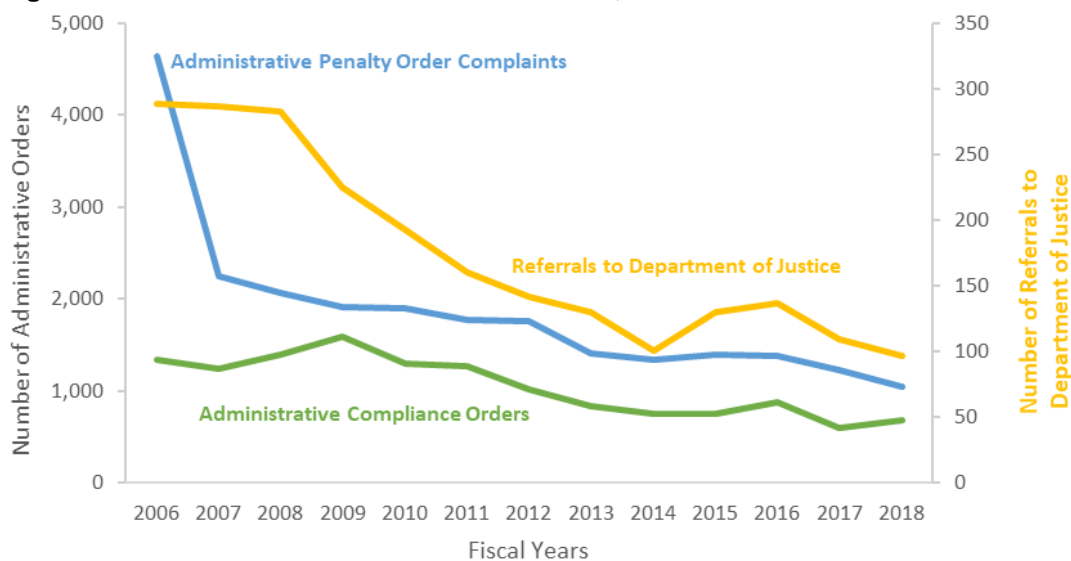
Source: OIG analysis of the EPA's annual enforcement data.

The EPA initiates different types of enforcement actions, such as administrative compliance orders with no penalty assessed, administrative penalty order complaints, and referrals to the Department of Justice. From FYs 2007 through 2018, the number of case initiations in all three categories declined (Figure 4). Even though referrals to the Department of Justice comprise just 5 to 8 percent of the total initiations in any given year, they are an important indicator of future enforcement results because they can result in enforcement actions with high penalty assessments and significant impacts on human health and the environment. As shown in Figure 4, except for a slight rebound in FYs 2015 and 2016, the total number of EPA referrals to the Department of Justice decreased each year. In FY 2018, referrals dropped below 100 for the first time in the 13-year period we analyzed.

Civil administrative actions are nonjudicial enforcement orders initiated and concluded by the EPA under its own authority. An administrative order with or without a penalty directs an individual, a business, or other entity to take action to come into compliance.

Civil judicial actions are initiated by the EPA, then referred to the Department of Justice, which files a formal lawsuit on behalf of the EPA.

Figure 4: Total EPA enforcement case initiations, FYs 2006–2018



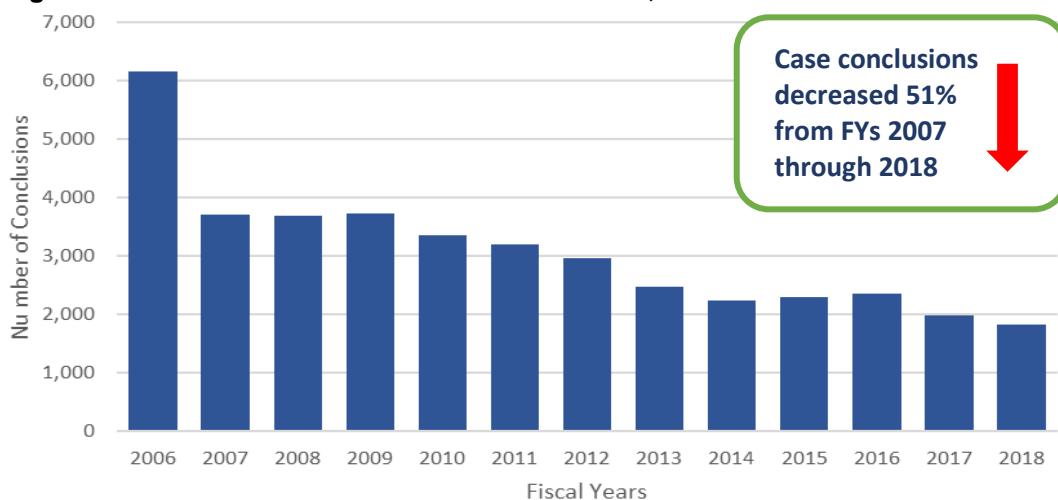
Source: OIG analysis of the EPA’s annual enforcement data.

The EPA generally initiates enforcement cases based on inspections, tips, and self-reported violations. In FY 2007, the EPA initiated 24 enforcement cases for every 100 inspections. The case initiation rate decreased to 17 cases per 100 inspections in FY 2018.

EPA Concluded Fewer Enforcement Cases

Overall, the number of EPA enforcement case conclusions decreased 51 percent from 3,714 in FY 2007 to 1,819 in FY 2018 (Figure 5; Table A-1). The number of conclusions held steady from FYs 2007 through 2009 but then subsequently decreased every year except FYs 2015 and 2016, which experienced small increases in enforcement case conclusions.

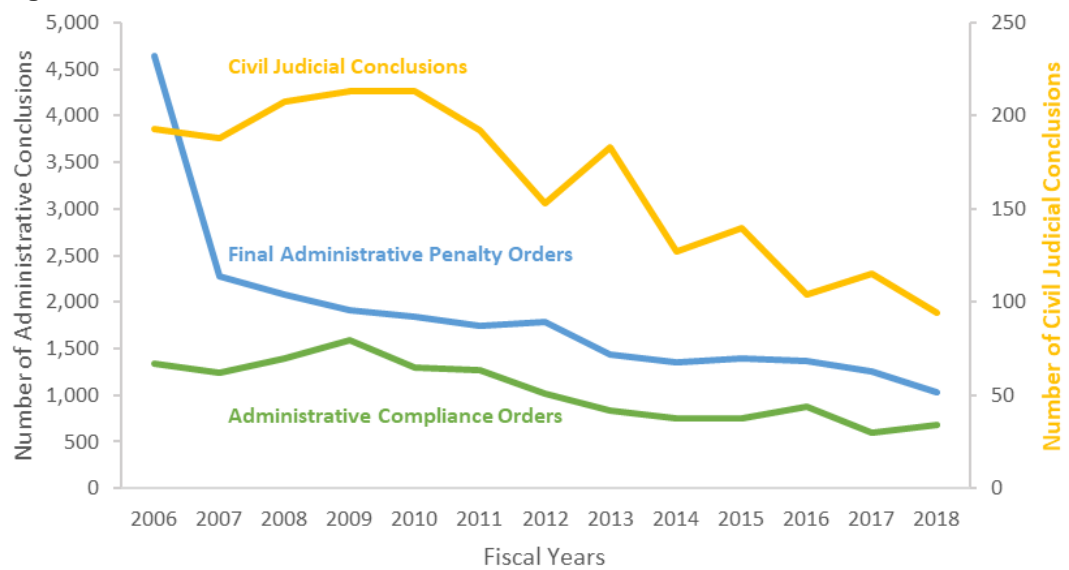
Figure 5: Total EPA enforcement case conclusions, FYs 2006–2018



Source: OIG analysis of the EPA’s annual enforcement data.

EPA enforcement case conclusions include administrative compliance orders and final administrative penalty orders concluded by the Agency, as well as civil judicial cases concluded by the Department of Justice, in coordination with the Agency. From FYs 2007 through 2018, 58 percent of the EPA’s case conclusions were final administrative penalty orders. Over the same time, the annual number of final administrative penalty orders decreased by 55 percent, from 2,284 to 1,038 (Figure 6). Just 6 percent of all conclusions were judicial cases, and those decreased from 188 in FY 2007 to 94 in FY 2018, a 50 percent decrease. Administrative compliance orders, which are resolved with regulated entities without a penalty, decreased by 45 percent over that same period, from 1,242 to 687.

Figure 6: EPA enforcement case conclusions, FYs 2006–2018



Source: OIG analysis of the EPA’s annual enforcement data.

Enforcement Results with Recorded Monetary Value Declined







The EPA’s enforcement results with a recorded monetary value—injunctive relief, penalties, and SEPs—generally declined from FYs 2007 through 2018 (Table 2).⁵ Concluded enforcement actions with high dollar-value results greatly impacted the total monetary value of enforcement results, which made the total annual dollar values vary from year to year. However, the number of annual concluded enforcement actions that recorded these types of results followed a steady, downward trend not



⁵ The EPA recorded no injunctive relief or penalty for 10 percent of the 33,738 enforcement actions concluded for FYs 2007 through 2018. These actions were not included in our trend analyses of injunctive relief and penalties.

reflected in the monetary values because the value of most concluded enforcement actions was relatively small.

Table 2: Summary of trends in EPA’s enforcement results with recorded monetary value, FYs 2007–2018

| | Annual number of concluded enforcement actions | | | Annual value of concluded enforcement actions (2018 USD) | | |
|--------------------------|---|----------------|------------------|--|---------------------------------|-------------------------------|
| | Visual depiction of trend | Range | Median / Average | Visual depiction of trend | Range | Median / Average |
| Injunctive relief |  | 1,245 to 3,023 | 2,247 / 2,225 |  | \$4 billion to \$21 billion | \$11 billion / \$12 billion |
| Penalties |  | 1,089 to 2,300 | 1,642 / 1,676 |  | \$69 million to \$6,135 million | \$160 million / \$855 million |
| SEPs |  | 100 to 202 | 122 / 134 |  | \$18 million to \$53 million | \$31 million / \$33 million |

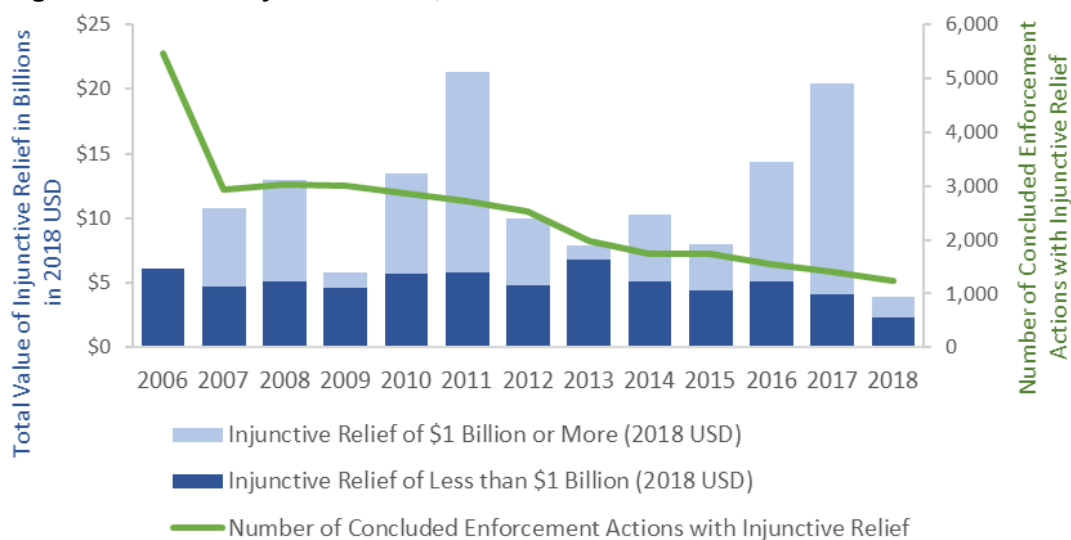
Source: OIG analysis of the EPA’s annual enforcement data.

Number of Concluded Enforcement Actions with Injunctive Relief Declined

The number of concluded enforcement actions with injunctive relief declined from FYs 2007 through 2018. The EPA concluded 2,932 enforcement actions with injunctive relief in FY 2007 compared to 1,245 in FY 2018, a 58 percent decrease (Figure 7; Tables 3 and A-2). From FYs 2007 through 2018, the total annual injunctive relief dollar value varied significantly. Over those 12 years, the EPA estimated the lowest value of injunctive relief in FY 2018 (\$3.9 billion) and estimated the highest value of injunctive relief in FY 2011 (\$21 billion).

Much of that variability stemmed from concluded enforcement actions with at least \$1 billion in injunctive relief. These high dollar-value enforcement results comprised, on average, less than 1 percent of the total number of concluded enforcement actions but contributed 58 percent of the total injunctive relief dollar value. For example, the case [settled](#) with Volkswagen accounted for 80 percent of total injunctive relief dollars in FY 2017, but the Volkswagen case comprised just two of the 1,394 enforcement actions with injunctive relief concluded that year (less than 1 percent). Although the EPA records the injunctive relief value for the year in which the enforcement action was concluded, the corrective actions involved are often implemented over the course of several years and sometimes decades.

Figure 7: Trend in injunctive relief, FYs 2006–2018



Source: OIG analysis of the EPA's annual enforcement data.

Table 3: Number and value of concluded enforcement actions with injunctive relief, by action size, FYs 2006–2018

| FY | Concluded enforcement actions with \$1 billion or more in injunctive relief | | Concluded enforcement actions with less than \$1 billion in injunctive relief | |
|------|---|-------------------------------------|---|-------------------------------------|
| | Total number | Total value (in billions, 2018 USD) | Total number | Total value (in billions, 2018 USD) |
| 2006 | 0 | \$0.00 | 5,454 | \$6.13 |
| 2007 | 4 | 6.06 | 2,928 | 4.68 |
| 2008 | 4 | 7.78 | 3,019 | 5.15 |
| 2009 | 1 | 1.14 | 3,014 | 4.66 |
| 2010 | 4 | 7.76 | 2,846 | 5.73 |
| 2011 | 4 | 15.44 | 2,712 | 5.85 |
| 2012 | 1 | 5.14 | 2,516 | 4.82 |
| 2013 | 1 | 1.08 | 1,975 | 6.78 |
| 2014 | 3 | 5.15 | 1,727 | 5.15 |
| 2015 | 3 | 3.57 | 1,737 | 4.38 |
| 2016 | 3 | 9.19 | 1,555 | 5.13 |
| 2017 | 2 | 16.34 | 1,392 | 4.11 |
| 2018 | 1 | \$1.64 | 1,244 | \$2.30 |

Source: OIG analysis of the EPA's annual enforcement data.

The EPA assessed injunctive relief valued at \$1 million or less in 92 percent of the enforcement actions concluded with injunctive relief from FYs 2007 through 2018. Together, the large number of concluded actions resulting in relatively low values of injunctive relief made up just 1 percent of the total injunctive relief dollars in this time frame. Considering all injunctive relief values from FYs 2007 through 2018, the \$3.9 billion of injunctive relief in FY 2018 was 62 percent less than the median annual value of \$10.5 billion. If billion-dollar outlier actions are not considered, the injunctive relief value for FY 2018 was at least 44 percent less than in any other year we assessed. However, despite this overall decline, the annual median value of injunctive relief tended to increase over time, from \$3,040 in FY 2007 to \$5,000 in FY 2018.

Number of Concluded Enforcement Actions with Penalties Declined

The number of concluded enforcement actions with penalties generally declined from FYs 2007 through 2018. There were 2,300 actions concluded with penalties in FY 2007 compared to 1,089 in FY 2018, a 53 percent decrease (Figure 8a; Tables 4 and A-3). The EPA reported the fewest enforcement actions concluded with penalties in FY 2018, 17 percent lower than the next-lowest total (1,306) in FY 2017. The total annual dollar amount of EPA-assessed penalties varied substantially from FYs 2007 through 2018. FY 2018 had the lowest penalty total with \$69 million; FY 2016 had the highest with \$6.1 billion.

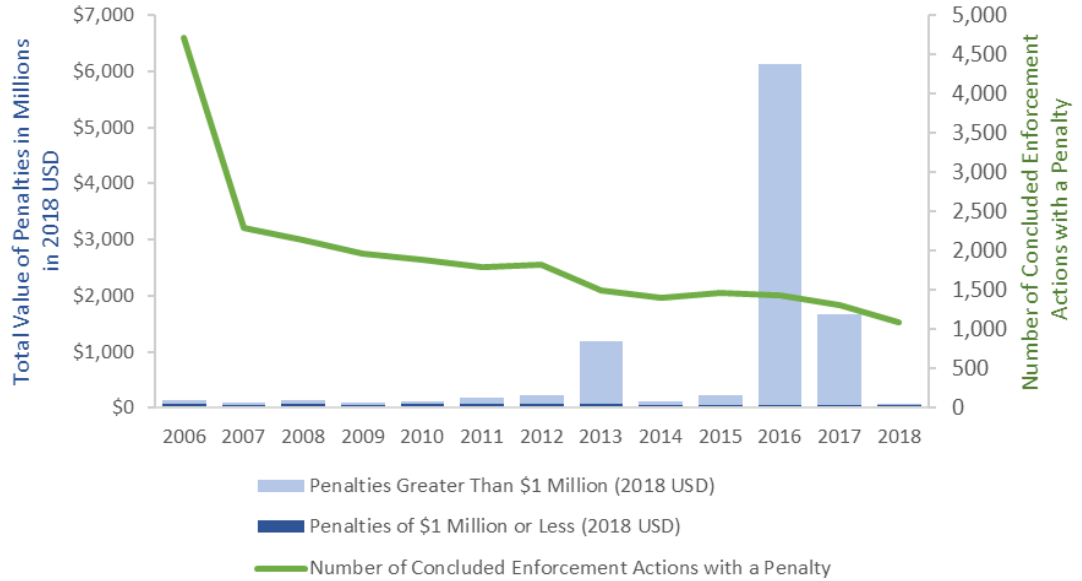
On average, the EPA assessed \$855 million in penalties each year, whereas the median annual penalty total was \$160 million. The stark difference between the average and median annual penalty totals illustrates the impact of large enforcement outcomes. Specifically, the courts assessed unusually high penalties against BP Exploration in [FY 2016](#) and Volkswagen in [FY 2017](#). Overall, from FYs 2007 through 2018, 88 percent of penalty dollars came from enforcement outcomes of \$10 million or more, despite those enforcement actions comprising just 0.1 percent of the number of actions concluded with penalties.

To clearly demonstrate the declining trend in the annual amount of penalties derived from concluded enforcement actions with penalties of \$1 million or less, we present the monetary results on a logarithmic scale in Figure 8b. The annual total of \$69 million in FY 2018 penalties was 19 percent less than the next-lowest annual total of \$86 million in FY 2007.

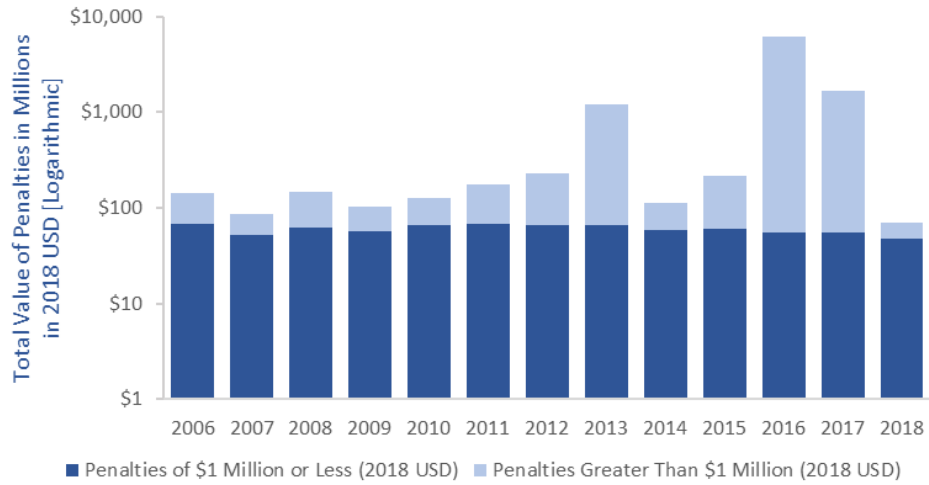
A **logarithmic scale** is a way of displaying in a compact way numerical data that vary greatly. In Figures 8 and 11, we present the annual total values using both linear and logarithmic scales. As the largest values are thousands of times larger than the smallest values, the trends in smaller-sized actions are more easily seen on a logarithmic scale.

Figure 8: Trends in EPA-assessed civil penalties, FYs 2006–2018

(a) *Number of concluded enforcement actions with a penalty and value of penalties*



(b) *Value of penalties, showing contribution of small enforcement actions concluded with penalties of \$1 million or less*



Source: OIG analysis of the EPA's annual enforcement data.

Table 4: Number and value of concluded enforcement actions with penalties, by action size, FYs 2006–2018

| FY | Concluded enforcement actions with penalties of more than \$1 million | | Concluded enforcement actions with penalties of \$1 million or less | |
|------|---|-------------------------------------|---|-------------------------------------|
| | Total number | Total value (in millions, 2018 USD) | Total number | Total value (in millions, 2018 USD) |
| 2006 | 15 | \$76 | 4,692 | \$68 |
| 2007 | 14 | 33 | 2,286 | 52 |
| 2008 | 19 | 84 | 2,123 | 63 |
| 2009 | 19 | 46 | 1,942 | 56 |
| 2010 | 23 | 60 | 1,871 | 65 |
| 2011 | 21 | 106 | 1,765 | 67 |
| 2012 | 22 | 160 | 1,806 | 67 |
| 2013 | 21 | 1,129 | 1,477 | 66 |
| 2014 | 17 | 53 | 1,393 | 59 |
| 2015 | 23 | 157 | 1,449 | 61 |
| 2016 | 26 | 6,079 | 1,403 | 56 |
| 2017 | 17 | 1,616 | 1,289 | 55 |
| 2018 | 9 | \$22 | 1,080 | \$48 |

Source: OIG analysis of the EPA's annual enforcement data.

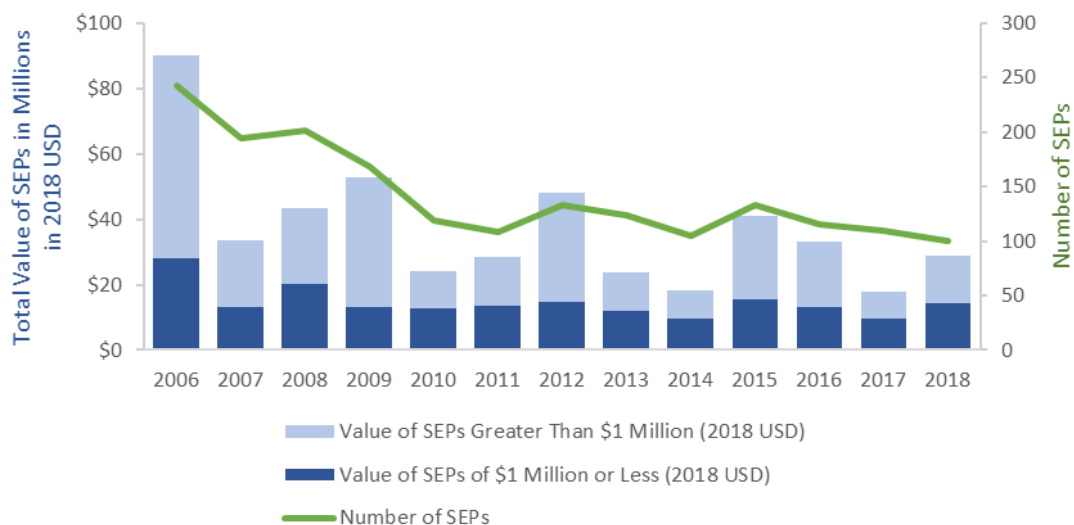
For the enforcement actions concluded with penalties from FYs 2007 through 2018, the EPA assessed penalties valued at \$100,000 or less in 92 percent of cases. As shown in Figure 8a, there were low overall enforcement action numbers in FYs 2017 and 2018 (1,306 and 1,089, respectively). These low numbers resulted from decreases in actions involving penalties of all sizes, other than those of \$100 or less. However, while the number of concluded enforcement actions with penalties declined over time, the annual median penalty value increased over time, rising from \$2,556 in FY 2007 to \$8,949 in FY 2018.

Number of SEPs Decreased

The total number of SEPs associated with a concluded enforcement action decreased significantly from FYs 2007 through 2011 and then stayed relatively steady from FYs 2012 through 2018 (Figure 9; Tables 5 and A-4). Overall, the number of SEPs decreased 48 percent, from 194 in FY 2007 to 100 in FY 2018. The estimated total annual value of SEPs also generally declined from FYs 2007 through 2018, but there were annual variations. FY 2017 had the lowest total estimated value (\$18 million) of SEPs, whereas FY 2009 had the highest (\$53 million).

In addition, 59 percent of the total value of SEPs from FYs 2007 through 2018 came from concluded enforcement actions that had a large estimated SEP values of \$1 million or more. However, enforcement actions with these larger-valued SEPs only accounted for 5 percent of the number of concluded enforcement actions with SEPs. The annual median dollar value of concluded enforcement actions with SEPs increased from \$30,400 in FY 2007 to \$93,443 in FY 2018, with some annual variation.

Figure 9: Trend in SEPs, FYs 2006–2018



Source: OIG analysis of the EPA’s annual enforcement data.

Table 5: Number and value of concluded enforcement actions with SEPs, by action size, FYs 2006–2018

| FY | Concluded enforcement actions with SEPs valued more than \$1 million | | Concluded enforcement actions with SEPs valued \$1 million or less | |
|------|--|--|--|--|
| | Total number | Total value (in millions, in 2018 USD) | Total number | Total value (in millions, in 2018 USD) |
| 2006 | 22 | \$62 | 199 | \$28 |
| 2007 | 5 | 21 | 182 | 13 |
| 2008 | 8 | 23 | 178 | 20 |
| 2009 | 9 | 39 | 143 | 13 |
| 2010 | 4 | 11 | 113 | 13 |
| 2011 | 6 | 15 | 97 | 13 |
| 2012 | 9 | 33 | 116 | 15 |
| 2013 | 4 | 12 | 106 | 12 |
| 2014 | 5 | 9 | 97 | 10 |
| 2015 | 6 | 25 | 117 | 16 |
| 2016 | 6 | 20 | 101 | 13 |
| 2017 | 5 | 8 | 90 | 10 |
| 2018 | 8 | \$15 | 88 | \$14 |

Source: OIG analysis of the EPA’s annual enforcement data.







Estimated Environmental Benefits Associated with Concluded Enforcement Actions Varied or Declined

Of the three types of environmental benefits tracked by the EPA, the number of concluded enforcement actions for two types of environmental benefits—waste reduction and pollutant reduction—varied from FYs 2012 through 2018 (Table 6).⁶ The number of the third type of environmental benefit—cleanup commitments—generally declined during that time.

⁶ The EPA changed the way it tracks its environmental benefits information in FY 2012. We constrained the scope of our trend analyses for these three measures to FYs 2012 through 2018 to allow year-to-year comparisons.

The annual value of pollutant reduction commitments generally declined from FYs 2012 through 2018. Concluded enforcement actions with large commitments greatly impacted the annual value of environmental benefits, which led to variations in the mass and volume values.

Table 6: Summary of trend in enforcement results with commitments for environmental benefits, FYs 2012–2018

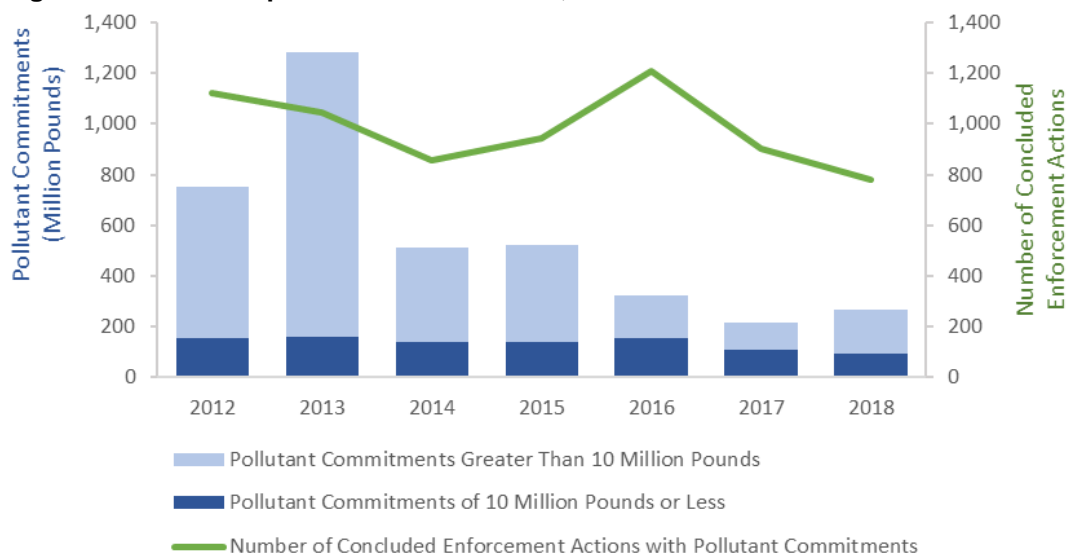
| | Annual number of concluded enforcement actions | | | Annual value of concluded enforcement actions | | |
|----------------------------|---|--------------|------------------|---|---|---|
| | Visual depiction of trend | Range | Median / Average | Visual depiction of trend | Range | Median / Average |
| Pollution reduction |  | 779 to 1,210 | 944 / 980 |  | 215 million pounds to 1,281 million pounds | 515 million pounds / 554 million pounds |
| Waste reduction |  | 42 to 51 | 44 / 45 |  | 148 million pounds to 61,938 million pounds | 541 million pounds / 9.8 billion pounds |
| Cleanup |  | 101 to 229 | 148 / 161 |  | 75 million cubic yards to 871 million cubic yards | 397 million cubic yards / 425 million cubic yards |

Source: OIG analysis of the EPA’s annual enforcement data.

Commitments to Reduce, Treat, or Eliminate Pollution as a Result of Concluded Enforcement Actions Decreased

The number of concluded enforcement actions that included commitments to reduce, treat, or eliminate pollution decreased by 31 percent when comparing FYs 2012 and 2018, although the number increased in FY 2015 and again in FY 2016 (Figure 10; Tables 7 and A-5). The EPA concluded the highest number of enforcement actions with this type of commitment (1,210) in FY 2016. The annual total value of the commitment in pounds generally decreased by 64 percent from FYs 2012 through 2018, but there was a single-year spike in the number of pounds in FY 2013. However, FY 2013 saw the highest level by weight, with commitments to treat 1,281 million pounds, 71 percent higher than the second-highest weight commitment in FY 2012 (751 million pounds). The median concluded enforcement action size involving pollutant commitments stayed relatively steady from FYs 2012 through 2017, and then dropped from 1,920 pounds in FY 2017 to 1,212 pounds in FY 2018.

Figure 10: Trends in pollutant commitments, FYs 2012–2018



Source: OIG analysis of the EPA's annual enforcement data.

Table 7: Number and value of concluded enforcement actions with pollutant commitments, by action size, FYs 2012–2018

| FY | Concluded enforcement actions with more than 10 million pounds of pollutant commitments | | Concluded enforcement actions with 10 million pounds or less of pollutant commitments | |
|------|---|-------------------------------------|---|-------------------------------------|
| | Total number | Total value (in millions of pounds) | Total number | Total value (in millions of pounds) |
| 2012 | 10 | 595 | 1,114 | 156 |
| 2013 | 21 | 1,123 | 1,025 | 158 |
| 2014 | 11 | 377 | 845 | 138 |
| 2015 | 10 | 386 | 934 | 138 |
| 2016 | 5 | 167 | 1,205 | 154 |
| 2017 | 3 | 105 | 899 | 111 |
| 2018 | 7 | 173 | 772 | 95 |

Source: OIG analysis of the EPA's annual enforcement data.

Concluded enforcement actions with large pollutant commitments greatly impacted annual results. Over 75 percent of the total pollutant reduction commitments resulted from concluded enforcement actions of over 10 million pounds, yet those large commitment actions comprised just 1 percent of the actions concluded with any-sized commitment to reduce, treat, or eliminate pollution. Furthermore, 87 percent of the total concluded enforcement actions had 100,000 pounds or less of pollutant reduction commitments. If large commitment actions are excluded from the analysis, the pounds of pollutant commitments remained stable from FYs 2012 through 2016, then decreased in FYs 2017 and 2018.

Commitments to Properly Treat, Minimize, or Dispose of Waste as a Result of Concluded Enforcement Actions Remained Steady

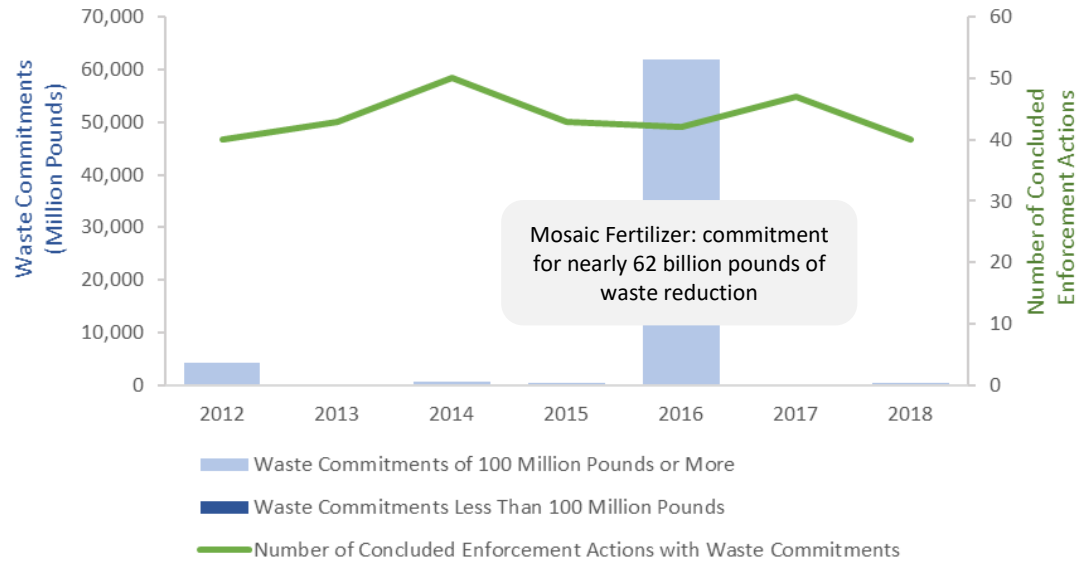
The number of concluded enforcement actions with waste commitments remained relatively steady from FYs 2012 through 2018, ranging between 42 and 51 enforcement actions each year (Figure 11a; Tables 8 and A-6). However, there were far fewer concluded enforcement actions that included waste commitments compared to commitments to achieve the other two types of environmental benefits. Nearly all (96 percent) of concluded enforcement actions with waste commitments from FYs 2012 through 2018 included less than 100 million pounds of waste commitments. All of these small commitments combined accounted for just 2 percent of the total pounds of waste commitments in that time frame.

Annual total waste commitments from small concluded actions—those with waste commitments less than 100 million pounds—remained steady from FYs 2012 through 2018 (Figure 11b). Concluded actions with a large weight of waste commitments impacted the trend in annual total waste commitments. For example, over 99 percent of the FY 2016 total waste commitment by weight involved a single [case](#) settled with Mosaic Fertilizer (Figure 11a):

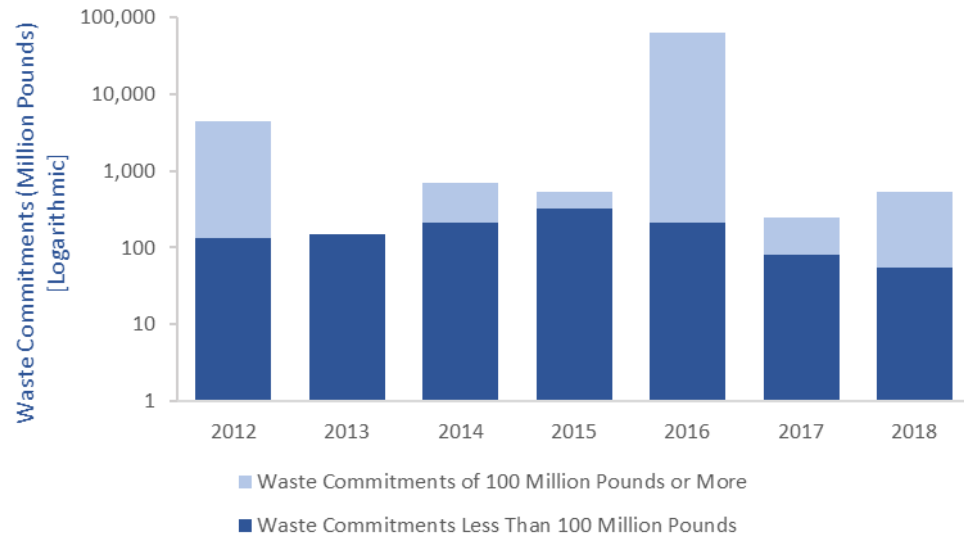
- Because of this settlement, the EPA reported waste commitments for FY 2016 that were more than 14 times greater than for any other year.
- The commitment from this settlement made up 90 percent of all the commitments for waste to be treated, minimized, or properly disposed for FYs 2012 through 2018.

Figure 11: Trends in waste commitments, FYs 2012–2018

(a) *Number of concluded enforcement actions with waste commitments and weight of commitments*



(b) *Value of waste commitments, showing contribution of small enforcement actions with contributions of less than 100 million pounds*



Source: OIG analysis of the EPA's annual enforcement data.

Table 8: Number and value of concluded enforcement actions with waste commitments, by action size, FYs 2012–2018

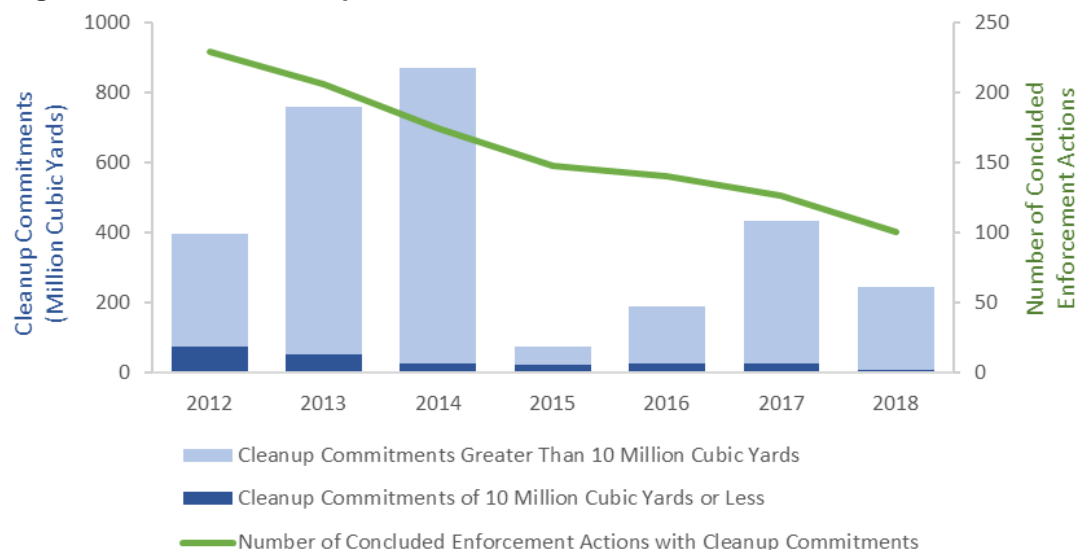
| FY | Concluded enforcement actions with 100 million pounds or more of waste commitments | | Concluded enforcement actions with less than 100 million pounds of waste commitments | |
|------|--|-------------------------------------|--|-------------------------------------|
| | Total number | Total value (in millions of pounds) | Total number | Total value (in millions of pounds) |
| 2012 | 3 | 4,236 | 40 | 132 |
| 2013 | 0 | 0 | 43 | 148 |
| 2014 | 1 | 497 | 50 | 214 |
| 2015 | 1 | 208 | 43 | 327 |
| 2016 | 4 | 61,726 | 42 | 211 |
| 2017 | 1 | 164 | 47 | 81 |
| 2018 | 2 | 486 | 40 | 56 |

Source: OIG analysis of the EPA’s annual enforcement data.

Commitments to Clean Up Contaminated Soil or Water as a Result of Concluded Enforcement Actions Decreased

Overall, the annual number of concluded enforcement actions with commitments to clean up contaminated soil or water steadily declined from 229 in FY 2012 to 101 in FY 2018, a total decrease of 56 percent (Figure 12; Tables 9 and A-7). Meanwhile, the annual total commitment value of contaminated soil or water to be cleaned varied. The EPA’s concluded enforcement actions generated the most total cleanup commitments in FYs 2013 and 2014 with 761 and 871 million cubic yards, respectively. Enforcement actions concluded in FY 2015 only generated 75 million cubic yards in cleanup commitments.

Figure 12: Trend in cleanup commitments, FYs 2012–2018



Source: OIG analysis of the EPA’s annual enforcement data.

Table 9: Number and value of concluded enforcement actions with cleanup commitments, by action size, FYs 2012–2018

| FY | Concluded enforcement actions with more than 10 million cubic yards of cleanup commitments | | Concluded enforcement actions with 10 million cubic yards or less of cleanup commitments | |
|------|--|--|--|--|
| | Total number | Total value (in millions of cubic yards) | Total number | Total value (in millions of cubic yards) |
| 2012 | 7 | 321 | 222 | \$76 |
| 2013 | 4 | 708 | 202 | 53 |
| 2014 | 3 | 843 | 172 | 28 |
| 2015 | 2 | 50 | 146 | 25 |
| 2016 | 2 | 165 | 138 | 26 |
| 2017 | 3 | 404 | 124 | 29 |
| 2018 | 9 | 235 | 92 | \$9 |

Source: OIG analysis of the EPA's annual enforcement data.

Concluded enforcement actions with large cleanup commitments created variability in the annual results. Overall, 92 percent of the seven-year total value came from actions with commitment values over 10 million cubic yards. Much of the annual variability stemmed from the timing of these large cleanup commitments. When we excluded those 30 large commitments from our analysis, the cleanup commitments show a decline from FYs 2012 through 2018, for a net decrease of 88 percent.

Despite making up a significant portion of the total volume of cleanup commitments, the large commitment actions comprised just 3 percent of the total number of enforcement actions concluded with any commitment amount from FYs 2012 through 2018. Rather, 82 percent of the total number of enforcement actions concluded with cleanup commitments included commitments of 100,000 cubic yards or less.

EPA's Enforcement Resources Declined

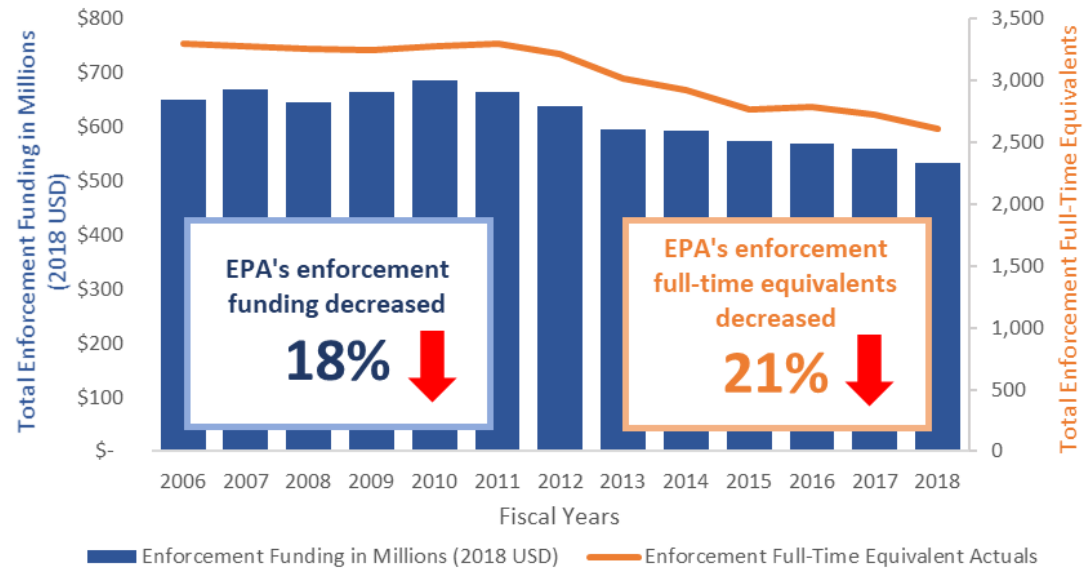
To place the decline in enforcement results in context, we also analyzed the trends in the resources available to the EPA for conducting enforcement.⁷ Overall funding for the EPA's enforcement program generally declined from FYs 2006 through 2018, as did the number of enforcement staff, also referred to as *full-time equivalents*.

Comparing FY 2006 to FY 2010, annual funding for the EPA's enforcement program increased by 6 percent, from \$650 million to \$686 million. However, funding decreased from FYs 2010 through 2018, reaching a low in FY 2018 at \$534 million (Figure 13). Funding for the enforcement program decreased by 18 percent when comparing FYs 2006 and 2018, but remained between 6 and 7 percent of the EPA's total budget each year from FYs 2006 through 2018.

⁷ These resources include programs for enforcement and compliance assistance to regulated entities, but the EPA does not track these resources separately.

Figure 13 also shows that the number of full-time equivalents generally declined from FYs 2012 through 2018 after being relatively steady from FYs 2006 through 2011. Overall, the total number of enforcement full-time equivalents dropped from 3,301 in FY 2006 to 2,605 in FY 2018, a 21 percent decrease.

Figure 13: Total EPA enforcement resources, FYs 2006–2018



Source: OIG analysis of the EPA's Human Resources data.

Eleven of 15 Enforcement Measures Continued to Decrease in FY 2019

The EPA released its FY 2019 enforcement results on February 20, 2020, which allowed us to examine whether the trends we identified for FYs 2007 through 2018 continued in FY 2019. To make a direct comparison, we converted the 2019 monetary values to 2018 USD for injunctive relief, penalties, and SEPs.
















Compared to FY 2018, 11 of the 15 enforcement measures continued to decline in FY 2019 (Table 10). Four enforcement measures increased in comparison to FY 2018:

- The estimated recorded value of all injunctive relief increased 9 percent.
- The total value of penalties assessed increased more than 400 percent.
- The number of concluded enforcement cases with pollutant commitments and the value of these pollutant commitments increased by 3 percent and 19 percent, respectively.

The EPA's enforcement resources continued to decline in FY 2019. Compared to FY 2018, the enforcement budget decreased by approximately 5 percent, or

\$31 million, and the number of enforcement full-time equivalents decreased by nearly 10 percent.⁸

Table 10: Trends in enforcement activities, actions, and results from FYs 2018 to 2019

| | Number of enforcement activities, actions, and results | Value of enforcement results (all monetary values in 2018 USD) |
|--|--|--|
| Inspections (compliance monitoring activities) | <ul style="list-style-type: none"> EPA inspections decreased by approximately 4 percent in FY 2019 compared to FY 2018, from 10,734 to 10,328. While the downward trend continued into FY 2019, the rate of decrease slowed.  | |
| Case initiations | <ul style="list-style-type: none"> EPA case initiations—in the form of compliance orders, penalty orders, and referrals to the Department of Justice—decreased in FY 2019 compared to FY 2018. There were 87 cases referred to the Department of Justice in FY 2019, 13 percent fewer than the prior low of 100 case referrals in FY 2018.  | |
| Case conclusions | <ul style="list-style-type: none"> The EPA concluded 1,680 cases in FY 2019, 7 percent fewer than in FY 2018.  | |
| Injunctive relief | <ul style="list-style-type: none"> The number of concluded enforcement actions with injunctive relief decreased by 17 percent, from 1,233 in FY 2018 to 1,028 in FY 2019.  | <ul style="list-style-type: none"> Concluded enforcement actions resulted in \$4.35 billion in injunctive relief in FY 2019, up 9 percent from FY 2018. 43 percent of the FY 2019 injunctive relief resulted from an enforcement action against the City of New York.  |
| Penalties | <ul style="list-style-type: none"> The number of concluded enforcement actions with a penalty decreased by 12 percent, from 1,088 to 960.  | <ul style="list-style-type: none"> The EPA assessed \$354 million in penalties in FY 2019, which was more than 400 percent higher than in FY 2018. 73 percent of the FY 2019 penalty dollars resulted from a single enforcement action against Fiat Chrysler.  |
| SEPs | <ul style="list-style-type: none"> The number of SEPs decreased by 18 percent, from 99 in FY 2018 to 81 in FY 2019.  | <ul style="list-style-type: none"> The total SEP value decreased 12 percent from FY 2018 to FY 2019, from \$29 million to \$26 million.  |
| Pollution commitments | <ul style="list-style-type: none"> The EPA concluded 3 percent more enforcement actions that included pollution commitments in FY 2019 than in FY 2018.  | <ul style="list-style-type: none"> Concluded enforcement actions in FY 2019 resulted in 347 million pounds of pollution commitments, 19 percent more than in FY 2018.  |
| Waste commitments | <ul style="list-style-type: none"> The number of concluded enforcement actions with waste commitments decreased from 42 in FY 2018 to 31 in FY 2019, a 26 percent decrease.  | <ul style="list-style-type: none"> Concluded enforcement actions resulted in 99 percent fewer pounds of waste commitments, from 541 million in FY 2018 to five million in FY 2019.  |
| Cleanup commitments | <ul style="list-style-type: none"> Compared to FY 2018, the number of concluded enforcement actions with cleanup commitments decreased by 22 percent in FY 2019, from 102 to 80.  | <ul style="list-style-type: none"> Concluded enforcement actions produced 95 percent fewer cubic yards of waste commitments, from 245 million cubic yards in FY 2018 to 13 million in FY 2019.  |

Source: OIG analysis of the EPA's annual enforcement data.

⁸ In FY 2019, the offices of Federal Activities and Environmental Justice moved from the Office of Enforcement and Compliance Assurance to the Office of the Administrator, which accounted for 91 percent of the decrease in the enforcement budget and 9 percent of the decrease in the full-time equivalents between FYs 2018 and 2019.

Summary

In this report, we describe the trends in the EPA’s national annual compliance monitoring activities, enforcement actions, and enforcement results. Generally, enforcement results declined during our audit scope. These trends generally continued to decrease in FY 2019, although four measures increased. While identifying the trends is important, it is equally important to understand the key factors explaining the trends. Our forthcoming report will include an expanded discussion about the enforcement trends—including trends in regional and statute-specific federal enforcement results—and will describe our findings related to the key factors that contributed to these trends.

Agency Response and OIG Assessment

On March 30, 2020, the assistant administrator for Enforcement and Compliance Assurance provided an official response to the report (Appendix B). Additionally, we met with managers from the Office of Enforcement and Compliance Assurance to receive technical comments on the report, which we incorporated where appropriate.

EPA's Annual Enforcement Measures by Year

This appendix presents the EPA's enforcement measures for FYs 2006 through 2018. We generally excluded FY 2006's compliance monitoring activities, enforcement actions, and enforcement results from our trend analyses. We determined that FY 2006 was a unique year because the EPA concluded a historic number of enforcement actions and that including FY 2006 in our trend analyses exaggerated the overall decline in enforcement activities and results. In addition, data for estimated environmental benefits stemming from EPA enforcement activities and actions are constrained to FYs 2012 through 2018 because the EPA changed how it tracks environmental benefits information in FY 2012.

Table A-1: EPA compliance monitoring activities (inspections) and enforcement actions (cases initiated and concluded) by year, FYs 2006–2018

| FY | Number of inspections | Number of cases initiated | Number of case conclusions |
|-----------|------------------------------|----------------------------------|-----------------------------------|
| 2006 | 18,038 | 6,271 | 6,167 |
| 2007 | 16,046 | 3,784 | 3,714 |
| 2008 | 20,030 | 3,741 | 3,690 |
| 2009 | 20,201 | 3,731 | 3,724 |
| 2010 | 21,269 | 3,394 | 3,349 |
| 2011 | 19,513 | 3,199 | 3,201 |
| 2012 | 20,068 | 2,920 | 2,963 |
| 2013 | 18,315 | 2,379 | 2,466 |
| 2014 | 15,821 | 2,191 | 2,235 |
| 2015 | 15,729 | 2,287 | 2,292 |
| 2016 | 13,763 | 2,391 | 2,350 |
| 2017 | 11,947 | 1,937 | 1,980 |
| 2018 | 10,687 | 1,829 | 1,819 |

Source: OIG analysis of the EPA's annual enforcement data.

Table A-2: EPA enforcement results by year for injunctive relief, FYs 2006–2018

| FY | Total number of concluded enforcement actions with injunctive relief | Total injunctive relief in billions (2018 USD) | Median injunctive relief enforcement action (2018 USD) | Average injunctive relief enforcement action (2018 USD) |
|-----------|---|---|---|--|
| 2006 | 5,454 | \$6.13 | \$3,113 | \$1,124,012 |
| 2007 | 2,932 | 10.74 | 3,040 | 3,662,356 |
| 2008 | 3,023 | 12.93 | 2,328 | 4,275,597 |
| 2009 | 3,015 | 5.79 | 3,504 | 1,921,753 |
| 2010 | 2,850 | 13.49 | 3,562 | 4,733,298 |
| 2011 | 2,716 | 21.30 | 4,178 | 7,841,052 |
| 2012 | 2,517 | 9.96 | 2,733 | 3,955,561 |
| 2013 | 1,976 | 7.85 | 5,375 | 3,974,583 |
| 2014 | 1,730 | 10.30 | 3,726 | 5,952,311 |
| 2015 | 1,740 | 7.95 | 4,649 | 4,571,483 |
| 2016 | 1,558 | 14.32 | 5,225 | 9,192,587 |
| 2017 | 1,394 | 20.45 | 5,120 | 14,673,143 |
| 2018 | 1,245 | \$3.95 | \$5,000 | \$3,171,375 |

Source: OIG analysis of the EPA's annual enforcement data.

Table A-3: EPA enforcement results by year for penalties, FYs 2006–2018

| FY | Total number of concluded enforcement actions with a penalty | Total penalties in millions (2018 USD) | Median penalty enforcement action (2018 USD) | Average penalty enforcement action (2018 USD) |
|-----------|---|---|---|--|
| 2006 | 4,707 | \$143 | \$623 | \$30,432 |
| 2007 | 2,300 | 86 | 2,556 | 37,181 |
| 2008 | 2,142 | 147 | 3,841 | 68,539 |
| 2009 | 1,961 | 102 | 2,920 | 52,081 |
| 2010 | 1,894 | 125 | 3,619 | 65,932 |
| 2011 | 1,786 | 173 | 5,707 | 96,879 |
| 2012 | 1,828 | 227 | 6,558 | 124,239 |
| 2013 | 1,498 | 1,195 | 8,976 | 797,542 |
| 2014 | 1,410 | 112 | 8,834 | 79,346 |
| 2015 | 1,472 | 218 | 9,073 | 147,857 |
| 2016 | 1,429 | 6,135 | 8,778 | 4,293,115 |
| 2017 | 1,306 | 1,672 | 9,761 | 1,280,145 |
| 2018 | 1,089 | \$69 | \$8,949 | \$63,800 |

Source: OIG analysis of the EPA's annual enforcement data.

Table A-4: EPA enforcement results by year for SEPs, FYs 2006–2018

| FY | Total number of concluded enforcement actions with SEPs | Total SEPs value in millions (2018 USD) | Median SEP enforcement action value (2018 USD) | Average SEP enforcement action value (2018 USD) |
|-----------|--|--|---|--|
| 2006 | 243 | \$90 | \$62,250 | \$407,506 |
| 2007 | 194 | 34 | 30,400 | 180,248 |
| 2008 | 202 | 43 | 47,482 | 232,621 |
| 2009 | 168 | 53 | 38,629 | 347,220 |
| 2010 | 119 | 24 | 40,094 | 206,454 |
| 2011 | 109 | 28 | 68,625 | 275,804 |
| 2012 | 133 | 48 | 61,481 | 384,714 |
| 2013 | 124 | 24 | 52,648 | 216,563 |
| 2014 | 105 | 18 | 49,943 | 180,132 |
| 2015 | 133 | 41 | 92,964 | 332,524 |
| 2016 | 115 | 33 | 84,123 | 309,050 |
| 2017 | 110 | 18 | 72,708 | 186,801 |
| 2018 | 100 | \$29 | \$93,443 | \$301,343 |

Source: OIG analysis of the EPA's annual enforcement data.

Table A-5: EPA enforcement results by year for commitments to reduce, treat, or eliminate pollution, FYs 2012–2018

| FY | Total number of concluded enforcement actions with pollution commitments | Total value of commitments (million pounds) | Median enforcement action value (pounds) | Average enforcement action value (pounds) |
|-----------|---|--|---|--|
| 2012 | 1,124 | 751 | 1,577 | 668,061 |
| 2013 | 1,046 | 1,281 | 1,854 | 1,224,724 |
| 2014 | 856 | 515 | 1,846 | 601,129 |
| 2015 | 944 | 524 | 1,823 | 555,030 |
| 2016 | 1,210 | 321 | 1,957 | 265,441 |
| 2017 | 902 | 215 | 1,920 | 238,592 |
| 2018 | 779 | 268 | 1,212 | 343,804 |

Source: OIG analysis of the EPA's annual enforcement data.

Table A-6: EPA enforcement results by year for commitments to properly treat, minimize, or dispose of waste, FYs 2012–2018

| FY | Total number of concluded enforcement actions with waste commitments | Total value of waste commitments (million pounds) | Median enforcement action value (pounds) | Average enforcement action value (pounds) |
|-----------|---|--|---|--|
| 2012 | 43 | 4,368 | 8,706 | 101,578,770 |
| 2013 | 43 | 148 | 3,500 | 3,439,958 |
| 2014 | 51 | 711 | 3,600 | 13,937,828 |
| 2015 | 44 | 535 | 2,567 | 12,169,683 |
| 2016 | 46 | 61,938 | 6,025 | 1,346,471,350 |
| 2017 | 48 | 246 | 2,829 | 5,115,987 |
| 2018 | 42 | 541 | 17,343 | 12,892,508 |

Source: OIG analysis of the EPA's annual enforcement data.

Table A-7: EPA enforcement results by year for commitments to clean up contaminated soil or water, FYs 2012–2018

| FY | Total number of concluded enforcement actions with cleanup commitments | Total value of cleanup commitments (millions of cubic yards) | Median enforcement action value (cubic yards) | Average enforcement action value (cubic yards) |
|-----------|---|---|--|---|
| 2012 | 229 | 397 | 3,000 | 1,731,743 |
| 2013 | 206 | 761 | 2,173 | 3,693,768 |
| 2014 | 175 | 871 | 2,100 | 4,975,208 |
| 2015 | 148 | 75 | 938 | 506,841 |
| 2016 | 140 | 191 | 772 | 1,363,257 |
| 2017 | 127 | 433 | 2,640 | 3,409,015 |
| 2018 | 101 | 245 | 1,400 | 2,421,625 |

Source: OIG analysis of the EPA's annual enforcement data.

Agency Response to Draft Report




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C., 20460

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

March 30, 2020

MEMORANDUM

SUBJECT: Response to the Office of Inspector General Draft Report “EPA’s Compliance Monitoring Activities, Enforcement Actions, and Enforcement Results Generally Decreased from Fiscal Years 2006 Through 2018,” Project No. OA&E-FY19-0030

FROM: Susan Parker Bodine 

TO: Kathryn Hess, Acting Director
Water Directorate, Office of Audit and Evaluation
Office of the Inspector General

Thank you for the opportunity to respond to the draft findings presented in the Office of Inspector General (OIG) Draft Report, “EPA’s Compliance Monitoring Activities, Enforcement Actions, and Enforcement Results Generally Decreased from Fiscal Years 2006 Through 2018.” We generally agree with the report’s data on EPA-led enforcement activities, actions, and results from fiscal years 2006 through 2018. However, we do have several comments on the report.

First, we are concerned that the OIG has significantly shortened the time for review and comment on this important report. At a minimum, we would like to be afforded the normal review period of 30 days for draft reports.

Perhaps due to the short deadline for completing the report, none of the graphs have been updated to include the EPA’s [FY 2019 Enforcement and Compliance Annual Results](#). As a result, the report does not fully reflect enforcement trends. Although the report’s text does acknowledge significant increases in enforcement and compliance results that occurred in FY 2019, the following areas were not captured in the graphs:

- Voluntary self-disclosed violations at over 1900 facilities expediting return to compliance, an estimated 20% increase compared to FY 2018.

- Investment of over \$4.4 billion in actions and equipment that achieve compliance with the law and control pollution, an increase of over \$400 million from FY 2018.
- \$471.8 million in combined Federal administrative and judicial civil penalties and criminal fines, the highest total of all but four of the past ten years.
- Commitments to reduce, treat, or eliminate 347.2 million pounds of pollution (air, toxics, and water), the highest value in the past four years.
- 7.56 million pounds of emissions prevented from mobile sources, an increase of nearly 6.9 million pounds from FY 2018.
- 170 criminal cases opened, an increase from 128 in FY 2018, continuing to reverse the downward trend that began after 2011.
- A total of 137 criminal defendants charged, an increase from 107 in FY 2018, reversing a downward trend that began after 2013.
- Commitments for \$570.4 million in new site cleanup work, \$283 million in reimbursement of EPA's costs, and more than \$108 million in oversight billed, totaling \$961 million, an increase of over \$349 million from FY 2018.
- Cleanups and redevelopment at over 160 sites through use of Superfund enforcement tools, an increase of 6 sites from 2018.

Additionally, the report fails to note that our enforcement and compliance program focuses on achieving compliance using many tools, not limited to the number of individual enforcement actions taken. Recognizing that states are the primary implementers of our nation's environmental laws, the EPA will continue to focus where it can provide the most value, including on matters affecting multiple states or tribes, serving as a backstop when a state or tribe does not address serious noncompliance in a timely fashion, and assisting states and tribes when they lack the capability, resources, or will to address noncompliance.

If you have any questions, please contact OECA's Audit Follow Up Coordinator, Gwendolyn Spriggs at spriggs.gwendolyn@epa.gov.

Attachment

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